UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,607	12/05/2003	Rikin S. Patel	014208.1640 (93-03-025)	2892

35005 7590 01/28/2008

BAKER BOTTS L.L.P.
2001 ROSS AVENUE, 6TH FLOOR
DALLAS, TX 75201-2980

EXAMINER	
MADAMBA, GLENFORD J	

ART UNIT	PAPER NUMBER
2151	

NOTIFICATION DATE	DELIVERY MODE
01/28/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOmail2@bakerbotts.com
PTOmail4@bakerbotts.com

Office Action Summary	Application No.	Applicant(s)	
	10/729,607	PATEL, RIKIN S.	
	Examiner	Art Unit	
	Glenford Madamba	2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 October 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-12 and 15-45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2, 3-12 and 15-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Remarks

1. This action is in response to remarks filed by Applicant's representative on October 26, 2007.

2. Applicant's arguments / claim amendments filed October 26, 2007 have been fully considered but are now considered moot in light of the new grounds of rejection provided below for the current set of pending claims.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> **(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.**

2. Claims 2, 3-15, 16-26, and 29-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu et al (hereinafter Hsu), U.S. Patent US 7,146,544 in view of Agarwal et al (hereinafter Agarwal), U.S. Patent Publication US 2005/0172306 A1.

As per Claims 2, 11, 15, 26 and 34, Hsu in view of Agarwal discloses a method for managing faults in a web service architecture (i.e., web presentation architecture / "WPA") [col 7, L46] comprising:

receiving a service request (e.g., receiving a request for data) [Abstract] in a web service language (i.e., WSDL) [col 6, L54-58], wherein the service request comprises invoking a service over a network [col 3, L59 – col 4, L11] (e.g. "request_48" for 'task/service', such as data query, data entry, data modification, page navigation, etc.) [col 4, L41-45];

translating the service request into a non-web service language; [Agarwal: 0042] [0065-0069]

executing the service request (e.g., responding to the request) [Abstract] [transmission of a suitable response 150 back to the client 14) [col 4, L41-44] (i.e., shopping cart JavaBean) [col 5, L15-24] [col 5, L65 – col 6, L8];

encountering an exception during the execution, wherein the execution comprises a fault preventing the fulfillment of the service request (i.e., 'exception' or occurrence of errors / error handling) [col 1, L23-40];

persisting the fault (e.g., storing exceptions/errors including error codes in the error catalog_210) [col 8, L36-54]; and

providing a fault response (performing 'error handling' via error handler_208 to handle exceptions, such as determining the 'correct' error message to display) [col 7, L65 – col 8, L5].

While Hsu discloses substantial features of the invention of claim 2, as above, the additionally recited feature of view of translating the service request into a non-web service language is disclosed by Agarwal in a related endeavor. Agarwal discloses as his invention a systems and methods for determining run-time dependencies between logical components of distributed of stand-alone data processing systems, for integrated fault management (problem determination, impact analysis and repair for a set of cooperating components or processes [Abstract] [0001]. In particular, Agarwal discloses the additionally recited feature of translating the service request into a non-web service language (i.e., Structured Query Language {SQL}) [0042] [0065-0069].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine and/or modify Hsu's invention with the above said additional recited feature, as disclosed by Agarwal, for the motivation of reducing system mean time to recovery (MTTR) when failures/faults are detected, particularly in complex operational systems where dependencies can exist between the components of different services on a single system and also between the client and server

components of a service distributed multiple systems and network domains [0003-0004].

Claims 11, 15, 26 and 34 recite the same limitations as claim 1, are distinguished only by their statutory category, and thus rejected on the same basis.

As per Claims 3 and 16, Hsu discloses a method of claim 2, wherein the service request is received from a service consumer, the service consumer coupled to the network (e.g., client 14) [Fig. 2].

As per Claims 4, 17, 42 and 43, Hsu discloses the method of claim 3, wherein the fault response is provided to a fault service consumer, and wherein the fault service consumer is coupled to the network (e.g., client 14) [Fig. 2].

As per Claims 5, 18 and 44, Hsu discloses the method of claim 4, wherein the fault service consumer is the same as the service consumer (e.g., client 14) [Fig. 2].

As per Claims 6, 21 and 22, Hsu discloses the method of claim 2, wherein persisting the fault comprises labeling the fault with a unique identifier (e.g., error code) [Fig. 4] [col 7, L9-16].

As per Claims 7, 23 and 33, Hsu discloses the method of claim 6, further comprising storing the fault in a database (e.g., Object Cache Manager_114 w/ database) [col 6, L54-65] (e.g, storing exception/error codes in error catalog_210) [col 8, L36-54].

As per Claim 8, Hsu discloses the method of claim 7, further comprising storing multiple faults in the database, the storage comprising storing fault information (e.g, storing exception/error codes in error catalog_210) [col 8, L36-54].

As per Claim 9, Hsu discloses the method of claim 8, wherein providing a fault response comprises providing access to the database, the access operable to permit a user to track any fault stored in the database (e.g., error catalog 210 may be accessed based on error code) [col 8, L36-54].

As per Claims 10 and 25, Hsu discloses the method of claim 8, wherein providing a fault response further comprises presenting the fault information in a console, the console operable to list the fault information stored in the database [Fig. 4].

As per Claim 12, Hsu discloses the method of claim 11, further comprising a fault service implementation coupled to the fault service interface, the fault service interface operable to retrieve the fault information from the persistent store (e.g., retrieving data for subsequent use in processing later requests) [col 6, L54-67].

As per Claim 19, Hsu discloses the system of claim 12, further comprising a fault network coupled to the network, the fault network operable to couple the service interface, service implementation, persistent store, and fault service interface (WPA_100) [Fig. 2].

As per Claim 20, Hsu discloses the system of claim 11, wherein the persistent store is a database operable to store faults encountered during the performance (e.g., Object Cache Manager_114 w/ database) [col 6, L54-65] (e.g, storing exception/error codes in error catalog_210) [col 8, L36-54].

As per Claim 24, Hsu discloses the system of claim 12, wherein the fault service implementation is further operable to translate the fault information into a web service language (i.e., WSDL) [col 6, L54-58].

As per Claim 29, Hsu discloses the system of claim 26, wherein the web service language is a HyperText Transfer Protocol (e.g., HTTP) [col 4, L51].

As per Claim 30, Hsu discloses the system of claim 26, wherein the web service language is an application service interface (e.g., web application program) [col 7, L45].

As per Claim 31, Hsu discloses the system of claim 30, wherein the application service interface is Java message service (i.e., JSPs, J2EE) [col 2, L37-54].

As per Claim 32, Hsu discloses the system of claim 26, wherein the web service language is a protocol approved as a web service description language approved by the World Wide Web Consortium (e.g., HTTP) [col 4, L51] (i.e., WSDL) [col 6, L54-58].

As per Claim 35, Hsu discloses the system of claim 26, further comprising a sub-network coupled to the web services module [Fig. 3].

As per Claim 36, Hsu discloses the system of claim 35, further comprising at least one internal system, the at least one internal system coupled to the sub-network and operable to provide information required by the service request [Figs. 2 & 3].

As per Claim 37, Hsu discloses the system of claim 36, wherein the diagnostic module is further operable to identify any faults caused by the at least one internal system (various types of errors / exceptions that may occur) [col 7, L44-65] [col 8, L58 – col 9, L9].

As per Claim 38, Hsu discloses the system of claim 37, wherein the diagnostic module is further operable to communicate any faults to the fault persistence module (error handler/manager_128) [col 7, L9-16].

As per Claim 39, Hsu discloses the system of claim 38, wherein the fault persistence module is further operable to label each fault with a unique identifier (e.g., error code) [Fig. 4] [col 7, L9-16].

As per Claim 40, Hsu discloses the system of claim 39, wherein the fault persistence module is further operable to direct the persistent store to organize each fault by a unique identifier (e.g., error code) [Fig. 4] [col 7, L9-16].

As per Claim 41, Hsu discloses the system of claim 26, wherein the web service module is further operable to receive a fault status request [col 4, L40-45].

3. Claims 27, 28 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu et al (hereinafter Hsu), U.S. Patent US 7,146,544 in view of Agarwal et al (hereinafter Agarwal), U.S. Patent Publication US 2005/0172306 A1 and in further view of Catania et al (hereinafter Catania), U.S. Patent Publication US 2005/0015472 A1.

As per Claim 27, Hsu in view of Agarwal and in further view of Catania discloses the system of claim 26, wherein the web service language is any protocol registered in the Universal Description Discovery and Integration registry.

While the combination of Hsu and Agarwal discloses substantial features of the invention such as the system of claim 26, and in particular a method for managing faults in a web service architecture (i.e., web presentation architecture / "WPA") [col 7, L46], added feature of the system wherein the web service language is any protocol registered in the Universal Description Discovery and Integration registry is disclosed by Catania in a related endeavor.

Catania discloses as his invention a system and a method for issuing event notifications to managed objects to receive notification of events, determining whether the event is a fault, determining the source of the fault when the event is a fault, and propagating a status value indicative of the fault to all managed objects tha are affected by the fault [0011-0013]. In particular, Lech discloses the added feature of the system wherein the web service language is any protocol registered in the Universal Description Discovery and Integration registry (i.e., UDDI registry) [Catania: 0009].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Hsu and Agarwal with the added feature of the system wherein the web service language is any protocol registered in the Universal Description Discovery and Integration registry, as disclosed by Catania, for the motivation of providing a system and method that allows a manager to subscribe to selected types of events and notify the at least one manager of the occurrence of the selected types of events [Abstract].

As per Claim 28, Hsu in view of Agarwal and in further view of Catania discloses the system of claim 26, wherein the web service language is a remote procedure call.

While the combination of Hsu and Agarwal discloses substantial features of the invention such as the system of claim 26, and in particular a method for managing faults in a web service architecture (i.e., web presentation architecture / "WPA") [col 7, L46], the added feature of the system wherein the web service language is a remote procedure call is disclosed by Catania in a related endeavor.

Catania discloses as his invention a system and a method for issuing event notifications to managed objects to receive notification of events, determining whether the event is a fault, determining the source of the fault when the event is a fault, and propagating a status value indicative of the fault to all managed objects tha are affected by the fault [0011-0013]. In particular, Lech discloses the added feature of the system wherein the web service language is a remote procedure call (i.e., RPC Handler_124) [Catania: 0055].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Hsu and Agarwal with the added feature of the system wherein the web service language is a remote procedure call, as disclosed by Catania, for the motivation of providing a system and method that allows a manager to subscribe to selected types of events and notify the at least one manager of the occurrence of the selected types of events [Abstract].

As per Claim 45, Hsu in view of Agarwal and in further view of Catania discloses a system for managing faults in a web services architecture comprising:

a system interface operable to receive a service request in a web services format (e.g., WSDL, HTTP) [col 4, L50-51] [col 6, L54-58], the system interface further operable to translate the service request into a non-web service format;

a service implementation operable to fulfill the service request, generate a fault report, and persist the fault, the persistence comprising storing the fault report in a persistent store (e.g. storing the errors including the error codes in error catalog 210) [Fig. 3] (e.g., 'logging' exceptions) [col 9, L4-9], wherein generating a fault report comprises detecting a fault during the fulfillment of the service request (e.g., identifying, tracking and logging the errors/fault/exception) [col 7, L9-22], and persisting the fault comprises attaching a unique identifier (i.e., error codes) [col 8, L36-54] to the fault report (notification message / report to manager regarding faults and exceptions/errors) [Abstract] ;

a fault service implementation operable to retrieve the fault report from the persistent store and translate the fault report into a web service format (e.g., WSDL); and

a fault service interface operable to receive fault service requests and transmit a fault service response (WPA 100) [Figs. 1 & 2].

While the combination of Hsu and Agarwal discloses substantial features of the invention such as the system of claim 26, and in particular a method for managing faults in a web service architecture (i.e., web presentation architecture / "WPA") [col 7, L46], he does not explicitly disclose the added feature of the method further comprising translating the service request into a non-web service language. The feature is disclosed by Catania in a related endeavor.

Catania discloses as his invention a system and a method for issuing event notifications to managed objects to receive notification of events, determining whether the event is a fault, determining the source of the fault when the event is a fault, and propagating a status value indicative of the fault to all managed objects tha are affected by the fault [0011-0013]. In particular, Lech discloses the added feature of the method further comprising translating the service request into a non-web service language (i.e., SOAP protocol /format) [Catania: 0008-0009].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Hsu and Agarwal with the added feature of the method further comprising translating the service request into a non-web service language, as disclosed by Catania, for the motivation of providing a system and method that allows a manager to subscribe to selected types of events and notify the at least one manager of the occurrence of the selected types of events [Abstract].

Conclusion

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP 706.06(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

1. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenford Madamba whose telephone number is 571-272-7989. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Wallace Martin can be reached on 571-272-3440. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Glenford Madamba
Examiner
Art Unit 2151